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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,917	12/10/2003	Teruaki Itoh	160-402 (AMK)	6712
23117 7590 07/16/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
WRIGHT, PATRICIA KATHRYN				
ART UNIT		PAPER NUMBER		
1797				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/730,917

**Applicant(s)**

ITO, TERUAKI

**Examiner**

KATHRYN WRIGHT

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4, 7 and 9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 4, 7, 9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 28 April 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/5508)  
4) ☐ Interview Summary (PTO-413)  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of the Claims***

1. This action is in response to papers filed April 28, 2008 in which claims 1 and 9 were amended. The amendments have been thoroughly reviewed and entered.

Claims 1, 4, 7 and 9 are under prosecution.

Any objection/rejection not repeated herein has been withdrawn by the Office.

### ***Response to Amendment***

2. The amendment to the claims filed on April 28, 2008 does not comply with the requirements of 37 CFR 1.121(c) because the text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters (see claim 1). Amendments to the claims filed on or after July 30, 2003 must comply with 37 CFR 1.121(c). Nevertheless, the Examiner has considered the aforementioned Reply and an action on the merits follows.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "main part" in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "main part" in claim 1.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 4, and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 now recites "a main part including a disk-shaped closing section and disk-shaped operating section". The Examiner cannot locate any support in the specification for the "main part". Nor has Applicant cited where support for the main part can be found in the specification and/or drawings. Therefore, claim 1 contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention.

***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1, 4, and 9, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrooten (US Patent No. 4,872,572) in view of Tatsumi et al., (US Patent No. 4,915,243), hereinafter "Tatsumi", or Rimpler (US Patent No. 4,193,402).

Schrooten teaches a stopper for a tubular container. The stopper comprises an inserting section (defined by second section  $Z_2$  shown in Fig. 2), and a main part including a disk-shaped closing section (defined by section  $Z_1$ ) having a flat surface 10a (Fig. 2) that is configured to close an opening of the container when brought into intimate contact with the container opening. The Schrooten stopper also includes a disk-shaped operating section 2a. The operating section 2a is spaced from the closing section ( $Z_1$ ) in a longitudinal direction by an annular groove 10'. Note that the claim does not define anything structurally that separates the closing section from the insertion section.

The entire stopper (including inserting section) of Schrooten is formed of an elastically deformable liquid-tight member (i.e., rubber, see abstract). The inserting section also includes a cylindrical body 10b with annular flanges 14 a,b,c projected from the cylindrical body of the insertion section such that the annular flange presses against the inner surface of the tube-shaped specimen container to seal the container in fluid-tight manner. The annular flange section includes a plurality of notches between the flanges 14 a,b,c (see Fig. 4).

Note that the claims are drawn to the stopper, not the combination of container and stopper. The container is not positively recited in the claim, and therefore considered an intended use. The recitation with respect to the manner in which a claimed apparatus is intended to be employed, (i.e., liquid-tightly pressed on an inner surface of the container) fails to differentiate the claimed apparatus from a prior art

apparatus if the prior art apparatus teaches all the structural limitations of the claim (i.e., structural limitation of the stopper).

As discussed above, Schrooten does teach tapered annular flanges to frictionally engage the inner surface of the container; however, Schrooten does not specifically teach the use of at least two tapered annular flanges. However, the use of a plurality of tapered annular flanges is known in the art, see for example Tatsumi or Rumpler.

Tatsumi teaches a stopper for a tubular container B. The stopper comprises an inserting section 3, a closing section 3' and an operating section 1 (see Fig. 10). The inserting section is configured to be fitted into a container. The inserting section is formed of an elastically deformable liquid-tight member (i.e., rubber; see col. 5, line 57 et seq.) The inserting section also includes a cylindrical body having a constant diameter and at least two tapered annular flanges 4 and 7 projected from the cylindrical body such that the tapered annular flange presses against the inner surface of the tube-shaped specimen container to seal the container in fluid-tight manner (see Fig. 9). Tatsumi teaches it would be desirable to include another flange 7 in order to prevent lateral movement or rolling phenomenon that often occurs when only one flange is used to press on the inner surface of the container (see col. 6, line 53 et seq.) Furthermore, the court has held that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Rumpler teaches a stopper for a tubular container 15. The stopper comprises an

inserting section 2 and a closing section 1 integrally connected to the inserting section. The closing section is configured to close an opening of the container when brought into intimate contact with a rim of the opening (see Fig. 5). The inserting section is formed of an elastically deformable liquid-tight member (see col. 4, lines 15+). The inserting section also includes a cylindrical body having a plurality of tapered annular flanges 5, 6 projected from the cylindrical body such that the tapered annular flange presses against the inner surface of the tube-shaped specimen container to seal the container. The annular flange section includes a plurality of notches 7 which allow the flange to readily collapse the diameter of the insertion section to assist in the placing the insertion section of the stopper into the container, see Fig. 5.

Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the claimed invention to have included a plurality of tapered flanges of Tatsumi or Rumpler, on the stopper system of Schrooten, since Tatsumi teaches it would be desirable to use another flange in order to prevent lateral movement or rolling phenomenon that often occurs when only one flange is used to press on the inner surface of the container (see col. 6, line 53 et seq.) Furthermore, the court has held that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over C. J. Schrooten (US Patent No. 4,872,572) in view of Tatsumi (US Patent No. 4,915,243), or



Rumpler (US Patent No. 4,193,402), as applied to claim 1 above, and in further view of Gerarde (US Patent No. 3,902,477).

The teachings of Schrooten, Tatsumi and Rumpler have been previously summarized, *supra*. The combined system of Schrooten, Tatsumi and Rumpler does not explicitly teach the insertion section and closing section being formed of polypropylene resin (claim 7).

Gerarde teaches a stopper 30 including, *inter alia*, an inserting section and a closing section 29. The inserting section has a cylindrical body 28 for insertion into a container 10, see for example Fig. 1. The container and stopper of Gerarde are made of an inert material, in particular, polypropylene resin since it does not react with or in any way adversely affect the specimen to be stored therein (see col. 2, line 3+).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the claimed invention to have made the container and stopper system Schrooten, Tatsumi and Rumpler from polypropylene resin, as taught by Gerarde, since polypropylene does not react with or in any way adversely affect the specimen to be stored therein (see col. 2, line 3+).

Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to determine the optimum materials of construction based on considerations such as cost, ease of manufacture, reactions with the processing agents and/or maintaining the required reaction conditions with respect to temperature.

***Response to Arguments***

10. Applicant's arguments with respect to claims 1, 4, 7, and 9 have been considered but are moot in view of the new ground(s) of rejection as set forth above.

***Conclusion***

11. No claims allowed.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to P. Kathryn Wright whose telephone number is (571)272-2374. The examiner can normally be reached on Monday thru Thursday, 9 AM to 6 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

pkw

/Jill Warden/  
Supervisory Patent Examiner, Art Unit 1797